Statewide Collision Categories

Table 1 compares major collision categories and measures of exposure for 1999 through 2003. The total number of traffic collisions in 2003 increased by 0.8% from 2002, while fatal collisions increased 13.5%. Total fatalities increased 11.0% from the previous year, while the number of injuries decreased by 1.1%. The number of property damage collisions increased by 1.3%.

Table 1
Idaho Traffic Collision Data and Measures of Exposure: 1999-2003

	1999	2000	2001	2002	2003	Change 2002-2003	Avg. Change 1999-2002
Total Collisions	25,076	26,241	26,090	26,477	26,700	0.8%	1.9%
Fatal Collisions	245	241	225	230	261	13.5%	-2.0%
Persons Killed (Fatalities)	278	276	259	264	293	11.0%	-1.6%
Injury Collisions	9,256	9,392	9,231	9,688	9,661	-0.3%	1.6%
Persons Injured	14,069	14,276	14,021	14,762	14,601	-1.1%	1.7%
Property-Damage-Only Collisions (>$750)	15,575	16,608	16,634	16,559	16,778	1.3%	2.1%
Idaho Population (thousands)	1,252	1,294	1,321	1,341	1,366	1.9%	2.3%
Licensed Drivers (thousands)	881	893	901	911	926	1.6%	1.7%
Vehicle Miles of Travel (millions)	14,328	13,728	14,299	14,303	14,400	0.7%	0.0%
Registered Vehicles (thousands)	1,316	1,340	1,247	1,331	1,316	-1.1%	0.5%

Changes in the number of collisions can often be correlated with changes in state population, the number of drivers, number of registered vehicles, and the statewide Annual Vehicle Miles of Travel (AVMT). In 2003, the number of licensed drivers increased by 1.6%, the population grew by 1.9%, and the number of registered motor vehicles decreased by 1.1%.

The statewide AVMT increased by 0.7% in 2003. Commercial vehicles accounted for 18% of the statewide AVMT in 2003.

Fatality and Injury Rates

Table 2 shows the fatality and injury rates for 1999-2003.

Table 2
Fatality and Injury Rates per 100 Million AVMT 1999-2003

	1999	2000	2001	2002	2003	Change 2002-2003	Avg. Change 1999-2002
Fatality Rate	1.94	2.01	1.81	1.85	2.03	10.2%	-1.5%
Injury Rate	98.19	103.99	98.06	103.21	101.39	-1.8%	1.8%

Figures 1 and 2 illustrate fatality and injury rates per 100 million AVMT for the U.S. and Idaho. The 2003 U.S. fatality rate and U.S. injury rate estimates are preliminary and may change.

Figure 1
Traffic Fatality Rates per 100 Million Annual Vehicle Miles of Travel
For Idaho and the U.S.: 1994-2003

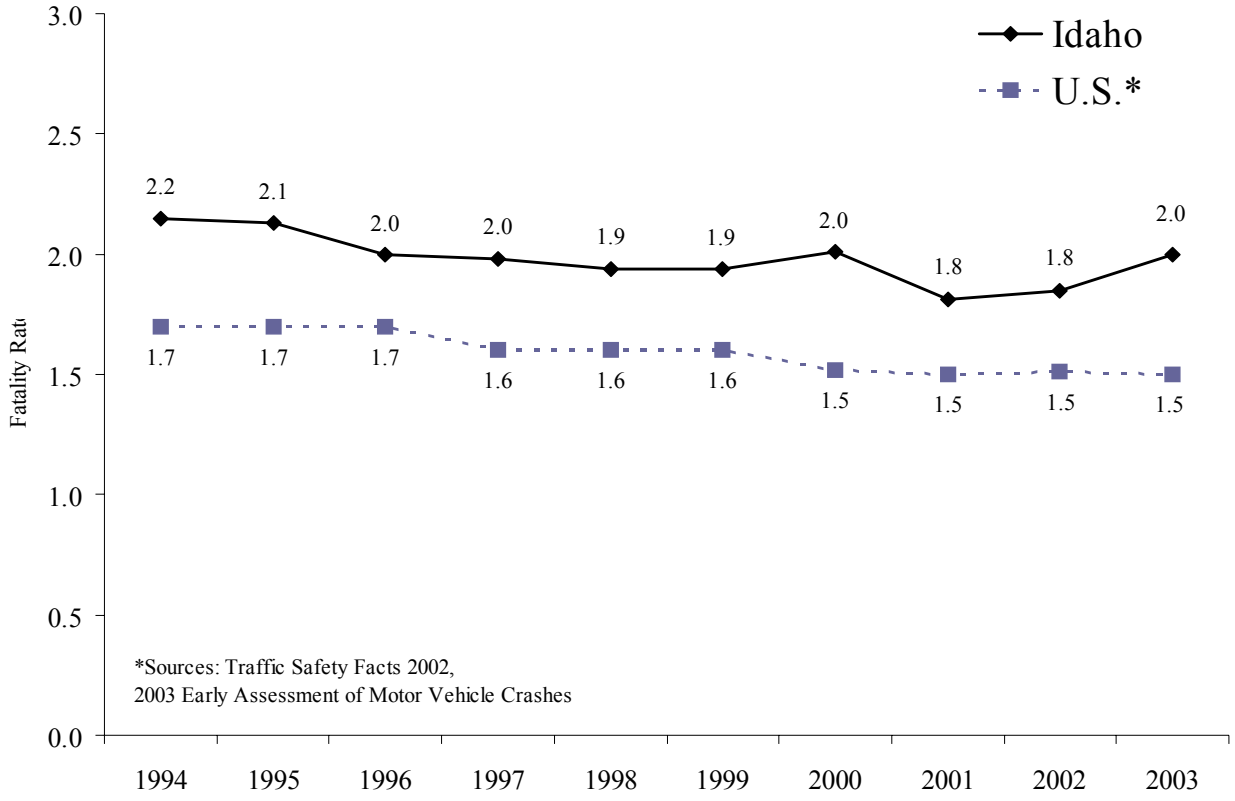
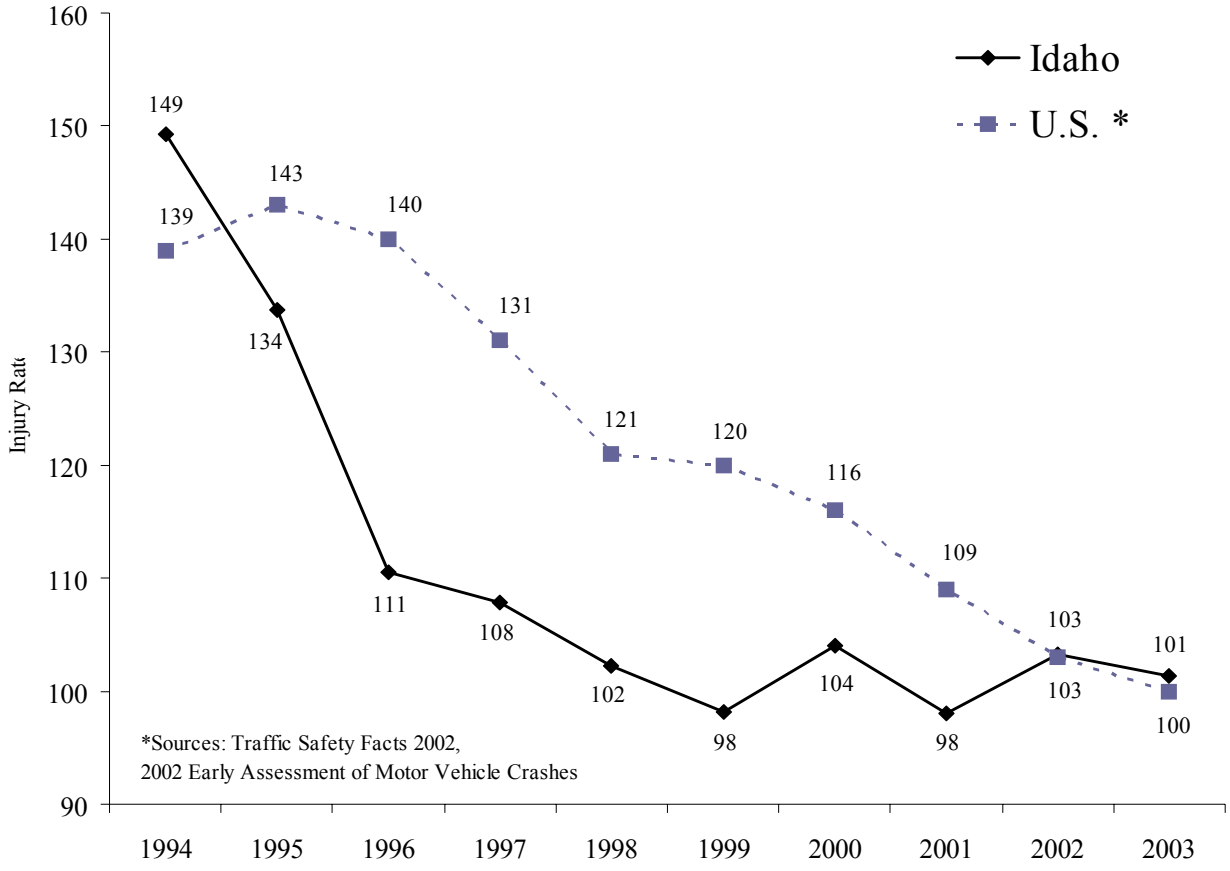


Figure 2

Traffic Injury Rates per 100 Million Annual Vehicle Miles of Travel: 1994-2003



Fatality and injury rates have varied over the past decade. Factors such as vehicle safety features, limited access highways, engineering improvements, occupant restraint usage, demographic changes and reduction in driving under the influence tend to reduce fatalities and injuries. Increases in AVMT, licensed drivers, registered vehicles, changes in reporting, and higher average speeds tend to increase the number of fatalities and injuries. The higher injury rate in 1994 corresponds with better identification of injuries after statewide training for law enforcement officers with the introduction of a new collision report form in 1994.

Injury Severity

Table 3 presents the injury severity distribution among persons involved in collisions from 1999 through 2003. The number of fatalities increased to 293 in 2003.

Table 3
Injury Severity of Persons Involved in Collisions: 1999-2003

	1999	2000	2001	2002	2003	Change 2002-2003	Avg. Change 1999-2002
Fatalities	278	276	259	264	293	11.0%	-1.6%
Serious Injuries	1,824	1,733	1,615	1,750	1,607	-8.2%	-1.1%
Visible Injuries	5,285	5,390	5,258	5,347	4,922	-7.9%	0.4%
Possible Injuries	6,960	7,153	7,148	7,665	8,072	5.3%	3.3%
No Injuries	51,316	52,482	52,013	52,995	53,613	1.2%	1.1%
Unknown / Missing	426	1,238	1,157	1,156	812	-29.8%	61.3%
Total Persons in Collisions	66,089	68,272	67,450	69,177	69,319	0.2%	1.6%

There was no single reason why fatalities increased in 2003. Increases were seen in just about all areas that contribute to crashes. Traffic crashes are rare events and are subject to a high degree of variability, meaning they randomly go up and down. It is important to note that while fatalities were up in 2003, serious injuries decreased by 8.2% from the prior year.

Economic Cost of Collisions

Table 4 gives estimated economic costs for Idaho motor vehicle collisions in 2003. Estimates in this table are based on 1994 Federal Highway Administration (FHWA) cost estimates for collisions.[1] The cost estimates are updated to 2003 dollars using the Gross Domestic Product Implicit Price Deflator Ratio. The components of the cost estimates include productivity losses, property damage, medical costs, rehabilitation costs, travel delay, legal and court costs, emergency service costs, insurance administration costs, premature funeral costs, and costs to employers. The estimated cost of Idaho collisions in 2003 was just over $1.7 billion. The total cost of collisions in 2003 was $87 million dollars more than the estimated cost of collisions in 2002.

Table 4
Economic Cost of Idaho Collisions: 2003 Estimates

Incident Description	Total Occurrences	Cost Per Occurrence	Cost Per Category
Fatalities	293	$3,129,653	$916,988,325
Serious Injuries	1,607	$216,668	$348,185,932
Visible Injuries	4,922	$43,334	$213,288,258
Possible Injuries	8,072	$22,871	$184,611,007
Property Damage Only	16,778	$2,407	$40,391,783
Total Estimate of Economic Cost			**$1,703,465,305**

In addition to the FHWA's study, the National Highway Traffic Safety Administration (NHTSA) also did a study on the costs of collisions. The NHTSA study not only concentrated on the costs of collisions but also who pays the costs. Table 5 is a combination of Table 22 and Table 23 from the NHTSA study, "The Economic Impact of Motor Vehicle Crashes, 2000" and shows the source of payment distribution of collision costs for each component of the costs. The total percentage for each source of payment is also included at the bottom.

Table 5
Estimated Source of Payment for Each Motor Vehicle Crash Cost Component

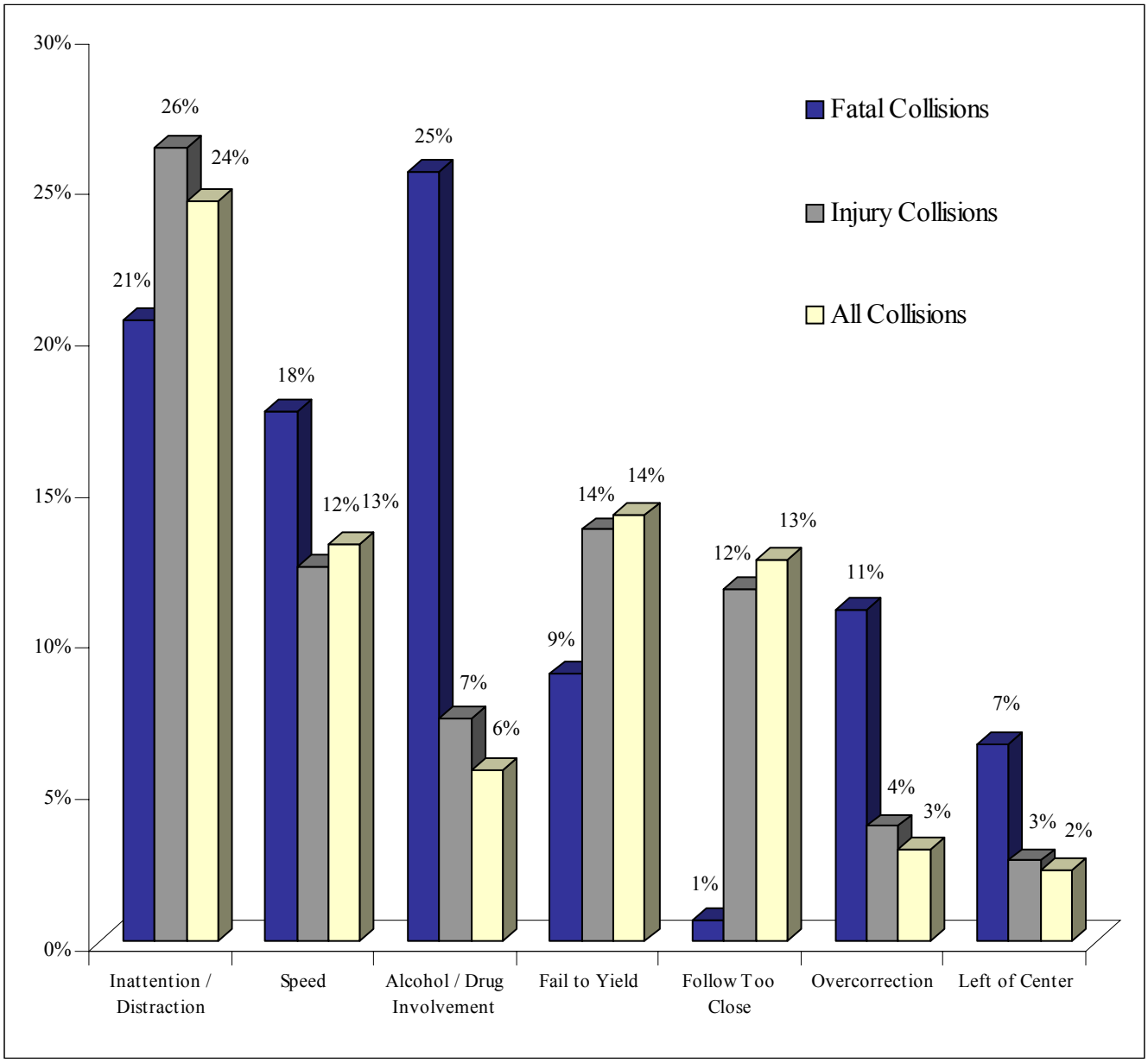
	Federal	State	Total Government	Insurer	Other	Self	Total
Medical	14.40%	9.76%	24.16%	54.85%	6.36%	14.62%	100.00%
Emergency Service	3.87%	75.75%	79.62%	14.74%	1.71%	3.93%	100.00%
Market Productivity	16.20%	3.06%	19.26%	41.09%	1.55%	38.10%	100.00%
Household Productivity	0.00%	0.00%	0.00%	41.09%	1.55%	57.36%	100.00%
Insurance Administration	0.89%	0.51%	1.40%	98.60%	0.00%	0.00%	100.00%
Workplace Costs	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
Legal / Court	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%
Travel Delay	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%
Property Damage	0.00%	0.00%	0.00%	65.00%	0.00%	35.00%	100.00%
Percentage of Total Costs	**6.41%**	**2.70%**	**9.11%**	**50.26%**	**14.48%**	**26.15%**	**100.00%**

The most significant point from the above table is that society at large picks up nearly 75% of all crash costs incurred by individual motor vehicle crash victims. These costs are passed on to the general public through insurance premiums, taxes, direct out-of-pocket payments for goods and services, and increased charges for medical care.[2]

Contributing Circumstances in Collisions

Figure 12 portrays the seven most prevalent contributing circumstances recorded for fatal collisions, injury collisions, and all collisions. For every vehicle involved in a collision, the investigating officer may indicate up to three circumstances contributing to the cause of the collision.

Figure 12
Top Seven Primary Contributing Circumstances Cited for Traffic Collisions in 2003



Collisions by Roadway Classification

Table 9 compares the number of fatal, injury, and total collisions by urban and rural classification. Urban roadways are defined as those within the city limits of cities with 5,000 people or more. Urban roadways tend to carry higher volumes of traffic at lower speeds, while rural roads carry lower traffic volumes at higher speeds.

Table 9
Comparison of Collisions by Roadway Classification: 1999-2003

	1999	2000	2001	2002	2003	Change 2002-2003	Avg. Change 1999-2002
Fatal Collisions	245	241	225	230	261	13.5%	-2.0%
Urban	36	39	40	47	43	-8.5%	9.5%
Rural	209	202	185	183	218	19.1%	-4.3%
Injury Collisions:	9,256	9,392	9,231	9,688	9,661	-0.3%	1.6%
Urban	5,129	5,356	5,329	5,577	5,515	-1.1%	2.9%
Rural	4,127	4,036	3,902	4,111	4,146	0.9%	-0.1%
Total Collisions:	25,076	26,241	26,090	26,477	26,700	0.8%	1.9%
Urban	14,503	15,463	15,752	15,676	15,841	1.1%	2.7%
Rural	10,573	10,778	10,338	10,801	10,859	0.5%	0.8%

In 2003, 84% of fatal collisions occurred on rural roads, whereas 41% of all collisions occurred on rural roads. In Idaho, 91% of the total road mileage is classified as rural roadway. Rural roads tend to have higher speed limits. Crashes at higher impact speeds have a greater probability of resulting in a fatality.[3]

The high percentage of rural roadways in Idaho may account for the fact that Idaho's fatality rate is consistently higher than the U.S. fatality rate.

Table 10 shows the number of collisions and collision rates on local and state system roadways (both interstate and non-interstate) for 1999-2003, and the number of collisions and collision rates statewide. Collision rates are lower than the statewide fatality and injury rates shown in Table 2 because multiple fatalities or injuries may occur in a single collision.

Table 10
Collision Rates for Local and State System Roadways: 1999-2003

Roadway Information	1999	2000	2001	2002	2003	Change 2002-2003	Avg. Change 1999-2002
Local:							
VMT (100 millions)	68.2	61.7	65.9	63.7	64.0	0.5%	-2.0%
Fatal Collisions	87	109	84	88	99	12.5%	2.4%
Injury Collisions	5,211	5,357	5,216	5,424	5,538	2.1%	1.4%
Total Collisions	14,714	15,740	15,343	15,461	15,635	1.1%	1.7%
Fatal Collision Rate	1.3	1.8	1.3	1.4	1.5	12.0%	6.3%
Injury Collision Rate	76.4	86.8	79.2	85.1	86.5	1.6%	4.1%
Total Collision Rate	215.7	255.1	232.9	242.6	244.2	0.7%	4.6%
State System (Non-Interstate):							
VMT (100 millions)	41.0	44.3	45.1	46.2	47.7	3.2%	4.1%
Fatal Collisions	114	85	98	108	112	3.7%	0.0%
Injury Collisions	2,639	2,642	3,014	3,329	3,297	-1.0%	8.2%
Total Collisions	6,897	6,775	8,067	8,477	8,751	3.2%	7.5%
Fatal Collision Rate	2.8	1.9	2.2	2.3	2.4	0.5%	-3.4%
Injury Collision Rate	64.4	59.7	66.9	72.1	69.2	-4.1%	4.2%
Total Collision Rate	168.3	153.1	178.9	183.6	183.6	0.0%	3.5%
Interstate:							
VMT (100 millions)	34.1	31.3	32.0	33.1	32.3	-2.5%	-0.8%
Fatal Collisions	44	47	43	34	50	47.1%	-7.5%
Injury Collisions	1,406	1,393	1,001	935	826	-11.7%	-11.9%
Total Collisions	3,465	3,726	2,680	2,539	2,314	-8.9%	-8.6%
Fatal Collision Rate	1.3	1.5	1.3	1.0	1.5	50.8%	-6.0%
Injury Collision Rate	41.3	44.5	31.3	28.2	25.6	-9.4%	-10.5%
Total Collision Rate	101.7	118.9	83.7	76.6	71.6	-6.6%	-7.0%
Statewide Totals:							
VMT (100 millions)	143.3	137.3	143.0	143.0	144.0	0.7%	0.0%
Fatal Collisions	245	241	225	230	261	13.5%	-2.0%
Injury Collisions	9,256	9,392	9,231	9,688	9,661	-0.3%	1.6%
Total Collisions	25,076	26,241	26,090	26,477	26,700	0.8%	1.9%
Fatal Collision Rate	1.7	1.8	1.6	1.6	1.8	12.7%	-1.8%
Injury Collision Rate	64.6	68.4	64.6	67.7	67.1	-1.0%	1.7%
Total Collision Rate	175.0	191.1	182.5	185.1	185.4	0.2%	2.0%